

**A TRIANGULAR FUZZY DEA MODEL FOR
EFFICIENCY EVALUATION**

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Abstract: Data envelopment analysis is a widely used non-parametric technique to measure and evaluate the relative efficiency of similar decision making units. Classical DEA models evaluate the efficiency from input and output values which are precise or crisp in nature. But when it is applied in real life situations input and output values vary even over small intervals of time. Hence mostly the data will be imprecise or fluctuating, which can very well be modelled by fuzzy set theory. So in this paper a DEA model is developed which can handle input output values which are fuzzy in nature. The fuzzy DEA model is developed as a fully fuzzy fractional programming problem and a methodology is suggested for solving it.

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Key Words: data envelopment analysis, triangular fuzzy numbers, fractional programming

1. Introduction

Data envelopment analysis (DEA) is a linear programming based non-parametric

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